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Why Uncertainty and Sustainability will be Key Drivers of Business Model Innovation

A conversation with Lorenzo Massa - interviewed by Christian Nielsen

I met Lorenzo Massa in a *maker space*-inspired innovation lab. It is a natural place for a researcher interested in creating ontologies, structures, learning and meaning that will enable flourishing businesses of the future to be made. He looks relaxed and in a hurry at the same time, but this is because he has things on his mind. He is a curious person by nature but also a researcher keen to make an impact on business practices. We agreed to start the discussion immediately and finish with coffee.

Lorenzo has been told that this interview is about picking his brain on the prospects for business model innovation as a field of research, and he does not let me down. He is well-prepared. To start, I ask Lorenzo:

How will the importance of business model innovation play out in the next decade?

"Perhaps we are over-enthusiastic about the importance of business models and business model innovation?" Lorenzo probes and adds: "This is an interesting question and can be answered both with

research and theory building in mind or through the lens of management practice."

"I would love to offer some comments first on recent research developments. Research has moved away from the definitional debate on what business models are. Scholars are accepting high-level definitions of the construct and, in general, the idea that it offers a valuable lens and unit of analysis (e.g., see Massa and Tucci, 2021).

Within earlier research, there was some tension around the idea that this construct was attracting so much attention and yet leading to a plurality of perspectives instead of cumulative progress and convergence. We commented on this in the literature review article by Zott et al. (2011) and the later conceptual paper for the Academy of Management (Massa et al., 2017).

My reading of the more recent literature is that scholars are starting to put emphasis on interdependencies and unpack their role concerning

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different dependent variables, for example, using configurational approaches, as done by Leppänen et al. (2023) or in conceptual terms, as elaborated by Lanzolla and Markides (2021). Another topic where I see some focus is monetisation, which I would consider the part of the business model concerned with how the value created is monetised and, therefore, captured by the firm. Here, we see the emergence of exciting work, often published in top journals (cf. McDonald & Eisenhardt, 2020). There are probably many other topics, but if I were to prioritise them, I would focus on the following two. The first is the intersection between business models and digital, which I think will receive increasing attention with advances in digital technologies, particularly generative AI (Haefner & Gassmann, 2023). The second one is understanding or shedding light on the nature of the business model innovation phenomenon, both business model design, which Chris Tucci and I defined as the generation and validation of a business model when none is in place and reconfiguration, the innovation of an existing business model (Massa & Tucci, 2014). I think these areas will play an essential role in the near future.

In practice, there are two, perhaps obvious yet critical, main areas in which business models will play a critical role.

The first area is sustainability. I will comment on this in greater detail further down the text, but in essence, the business model is essential for sustainability for two reasons.

One is that we need new business models and business model innovation to more convincingly unlock the innovation potential of firms and the private sector to turn sustainability issues into profit opportunities.

The other one is that we are progressively accepting, at least in some parts of the world, of which Europe is undoubtedly one, the idea that reducing value creation to benefit the customer and economic return to the firm is limiting. Even if we add the creation of employment and the payment of taxes, it is evident that firms have an impact, and often a significant one, along with additional value dimensions for several stakeholders. We are moving toward a

broader understanding of value and wealth creation (Lüdeke-Freund et al., 2022; Nielsen, 2023). Here, business models matter because the logic of doing business, which is used, influences how, where and what kind of value is created (or destroyed) and how this is distributed. However, our understanding of these relationships between business models and an extended notion of value and wealth creation is in its infancy to the best of my knowledge of the literature. Overall, this is an area where research could tremendously support practice. The second one is business model innovation in the presence of uncertainty, to be discussed later."

Our Understanding of the Business Model Innovation Processes will Mature.

From a research standpoint, I see a gap and an opportunity related to understanding better the nature of the business model innovation process. There has always been a gap here, particularly concerning the innovation of an existing business model. The main reason is that it is tough to observe that process because it can unfold over a long time, e.g., several years. Advances in digital technologies, like Blockchain (Schmuek, 2023), 6G (Ahokangas, 2023) and those associated with the Metaverse (Rosenstand, 2023) are pushing the need to react faster. Soon, we can observe such changes occurring in much shorter periods (Silvi et al., 2023). However, we have been confronted with the need to study a longitudinal phenomenon, which may take several years, making following these changes through direct observation impractical. The solution is conducting in-depth historical case studies similar to what Siggelkow (2002) did years ago. His idea of change occurring using changes in activities is also very much in line with the activity system perspective on the business model by Zott and Amit (2010). This could represent an exciting reference, methodologically and conceptually, for researching business model innovation in incumbent firms.

Another research gap here is the following. We know that one of the main barriers to business model innovation is cognitive in nature. We also have anecdotal evidence that even when you change leadership at

the top and replace the top management team with a new one, which brings a new way of thinking, more is needed to guarantee that cognitive barriers are overcome. The risk is that the rest of the organisation will continue operating within the boundaries of the mental models and linguistic schema that reflect the old business model and impede the migration to a new one. In synthesis, we know quite a bit about the challenges related to the cognitive manifestation of business models for business model reconfiguration. We also know that visual tools and maps of business models can help overcome these cognitive barriers. However, research in these areas needs to mature for two main reasons. The first one is that visual models of business models are often developed without anchoring in the knowledge in conceptual and formal modelling, which several colleagues and I have discussed (Szopinski et al., 2022). The second one is that we do now know much about the cognitive merits of different visual representations and models of business models because there is a gap in empirical research here. Fredrik Hacklin and I have advocated this and suggested some initial ideas (Massa & Hacklin, 2020). This could be a very fruitful area of research, Lorenzo notes.

Does Such a Thing as a Sustainable Business Model Exist?

Asking whether there is such a thing as a sustainable business model when you are in the line of business that Lorenzo is in is genuinely thought-provoking. According to Lorenzo, there is no such thing as a fully sustainable business model, but certainly, there are ways of doing business that allow for greater sustainability.

This is thought-provoking. By the principles of sustainability, it can be argued that no business model is entirely sustainable due to the various impacts of all business models, such as resource consumption or adverse effects. In this sense, strictly speaking, the most sustainable approach from an environmental perspective would be not engaging in business at all. Florian Lüdeke-Freund, Henning Breuer and I discuss this in Sustainable Business Model Design: 45 Patterns (Lüdeke-Freund et al., 2022). This is an impossibility theorem. We need business in the

same way in which we need an economy. Rather than discussing sustainable business models, it is more appropriate to refer to business models for sustainability (Schaltegger et al., 2016). These business models can potentially support companies in generating social, environmental, and economic value. In other words, they help create more sustainable value for several stakeholders. Alternatively, in the language of global sustainability governance frameworks, business models for sustainability contribute to reaching the United Nations Sustainable Development Goals (SDGs) (United Nations, 2015).

How do they do that? In essence, by supporting overcoming structural barriers to sustainability inherent in market functioning. When companies attempt to push the sustainability envelope, recurrent barriers tend to arise due to market dynamics. These barriers introduce managerial dilemmas for those caring about sustainability and its principles.

A concrete example of this market-driven dilemma is the tension between producing long-lasting products that support repair and reuse versus a business model that relies on selling products as frequently and broadly as possible to avoid market saturation. This tension results from how markets operate and highlights the importance of the logic companies use to create and monetise value, also known as the business model. Business models that have been inherited from the industrial economy may need to align with sustainable goals, but alternative models can help companies overcome barriers to sustainability. For instance, one solution to the dilemma mentioned above is to offer a modular product that combines a durable item with short-lived consumables. This approach enables experimentation with generating stable and scalable revenue from the consumables while allowing for the marketing of a long-lasting product. At its extreme, this approach could involve selling a product and a service where the product is designed to last, generating revenue through servicing.

In summary, a "business model for sustainability" refers to the value creation and capture logic that can partially overcome the recurring barriers to creating social and environmental value. Research to date

has identified 45 patterns of business models for sustainability (Lüdeke-Freund et al., 2018). Patterns are a repeatable solution to enduring environmental, social, and economic challenges that arise when an organisation aims to create, deliver, or capture value in a sustainability-oriented manner. They are problem-solution combinations. In this sense, patterns are practical and offer knowledge for action.

I see an opportunity for continuing research on patterns and disseminating that research using structures, templates, and a language that would make it worthwhile for those in charge of designing organisations and their business models.

Enabling Business Model Innovation Under Uncertainty will be Crucial for Future Success.

When discussing business model innovation under uncertainty, we are at the intersection between mental models, strategic innovation and vision or visionary leadership. The key is to understand that in the presence of uncertainty, managers tend to claim that they should innovate their business models (Massa, 2020). As researchers, we may be tempted to think that this refers to innovating value creation, delivery, and capture logic. We also consider business model innovation as what companies like Hilti did.1.

As I have suggested elsewhere (Massa, 2020), this is only sometimes appropriate. There is another, much more appropriate, interpretation of innovating a

¹ Hilti went from selling tools to renting out "tool hours", thus selling productivity instead of products

business model. I think the claim "we see uncertainty, we should innovate our business model" stands as a metaphor for the idea that "the known way of doing things is soon going to be invalid, but we do not know how or when". The "business model" refers to "what we know and understand", pointing to a, perhaps implicit, understanding of the construct as a dominant logic (Prahalad & Bettis, 1986) or a theory of the business, a lá Drucker (1994).

From a managerial standpoint, the claim that managers tend to make, in presence of considerable uncertainty, that they should "innovate the business model" is to be understood as the surface manifestation of the perception of a challenging and perhaps even unpleasant situation. It refers to the situation in which management "feels" or "perceives" (perhaps implicitly) that – mainly because of external changes – the known way of doing things is soon going to be no longer sufficient, but at the same time, that the timing and direction of change is highly unclear. And they point to the business model to capture "the known way of doing business" which must be innovated.

In practice, learning what to do in these situations will play a vital role in the next decade, as uncertainty, once an episodic event, is becoming the norm. Moreover, what to do is not that obvious in many cases. For this reason, this is another area where research can significantly contribute. The challenge here is, once again, methodological. Both in terms of time needed to observe these phenomena meaningfully and in terms of sample size (implicitly, I am pointing to multiple case studies and action research).

Coffee time!

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